

Title	Measles Specimen Collection and Transport (Virology)
Specimen Requirements	<ol style="list-style-type: none"> 1. Acceptable specimens: Nasopharyngeal (NP) swabs (recommended), throat swabs (virus isolation only), urine (virus isolation only). 2. Throat swabs and urine are NOT acceptable specimens for PCR testing. 3. Swabs must be placed in at least 1-2mL of viral transport media (VTM). Dry swabs will not be accepted. 4. Specimens must be received within 5 days of collection. 5. Specimens must be refrigerated at 2-8C immediately after collection.
Sampling Materials	<ol style="list-style-type: none"> 1. Viral Transport Media (VTM)-available commercially. Some require refrigeration, others do not — check package insert. VTM tubes must include at least 1-2mL liquid media. 2. Swab - Swab material should be synthetic (e.g. rayon, polyester, or Dacron). Calcium alginate or charcoal-impregnated swabs should not be used, nor should wood-shaft swabs. 3. Sterile containers and collection materials for urine or CSF specimens. 4. Cold packs or dry ice. 5. Insulated shipping boxes/containers with appropriate shipping labels.
Procedural Notes	<ol style="list-style-type: none"> 1. Be sure to properly label the specimen tube with at least the patient's name and date of collection. 2. Check the expiration date on the VTM tube to ensure product is acceptable and will continue to be acceptable once received at the ISDH laboratory. 3. After collection, all specimens should be stored at refrigerator temperature (2-8C) until shipped. If longer storage is required, place specimens in a -70C freezer (NEVER store, even temporarily, in a regular, -20°C freezer — this temperature will kill virus). Additionally, avoid freeze- thaw cycles, which is also lethal to viruses. 4. Complete a request form for each specimen with the following information: <ol style="list-style-type: none"> a. Name, birth date, race, and sex of patient b. Specimen type and date of specimen collection c. Date of symptom onset d. Suspected disease agent e. Complete patient history, travel history, and other relevant information f. Submitting clinic information-clinic name, address, phone number, fax number, contact name and email address (if available). 5. Special Instructions for Specimen Collection <ol style="list-style-type: none"> a. Throat Swab: Rub the tonsils and posterior pharynx with a Dacron-tipped plastic swab. Place the swab in the VTM tube. b. Nasopharyngeal Swab: Insert the Dacron-tipped swab through the nostril into the nasopharynx until tip reaches distance equivalent to that from the ear to the nostril of the patient. Rotate swab several times, remove, and place swab in VTM tube. c. Acute serum sample should be collected. d. Urine: Collect 2-5 ml of midstream, clean-catch urine in a sterile container. A catheter urine specimen may also be used.
Shipping Instructions	<ol style="list-style-type: none"> 1. Wrap the labeled specimen container with absorbent material and place in a biohazard specimen bag. Be sure to package each patient's specimens individually to avoid cross-contamination. 2. Place the requisition form in the side pocket of the biohazard bag. Never place the requisition form in with the specimen in case the specimen leaks during transit. If the specimen bag does not have 2 compartments, place the paperwork in a separate ziploc bag. 3. Place the specimen(s) in a styrofoam container with sufficient cold packs to maintain 4oC during shipment. For swabs and urine, if needed, dry ice can also be used if the specimen is frozen and/or transport time may be longer than 24 hours. If dry ice is used, do not form an airtight seal on the styrofoam container because dry ice releases carbon dioxide gas. 4. Place the styrofoam container into a cardboard shipping box, close lid, and seal. 5. Ship or transport by courier, the box compliant with DOT and IATA regulations. 6. Serum and whole blood are best transported to the lab at 4oC but can be sent at ambient temperature for same or next day delivery.
Reporting and TAT	